

ABSTRACT

A radial bearing assembly for a turret mooring system. The radial bearing has a radial clearance sufficient to allow the turret to have minor deflection without bearing contact against the turret's sliding surface. As a result, sliding wear on the lower bearing is reduced, and the upper bearing is allowed to rotate without incurring unnecessary bending moments caused by unavoidable structural tolerances in misalignment of the lower bearing with respect to the upper bearing's axis of rotation. In a storm environment, the lower bearing is capable of radially supporting the turret while allowing relative rotation of the vessel around the geostationary turret when larger mooring loads occur on the turret. A mounting arrangement for pads on radial bearing assemblies and the radial clearance allow replacement of the bearing elements while the vessel is moored by the turret in offshore waters.